OPERATIONAL GUIDELINES: Burn Graft OR Procedures and Graft Loss Prevention
Adults and Pediatrics

OBJECTIVE: To ensure that all staff are appropriately trained, prepared and equipped to provide the essential tasks necessary for the preparation of OR burn procedures and to have a clear understanding of expectations during the OR procedure for any burn patients that are having a surgical procedure. To provide direction for the appropriate steps, post surgically, related to skin graft preservation, adherence and overall successful graft take.

GUIDELINES:

Preoperative
1. A thorough preoperative history taking is critical; patient’s medications (particularly those with anticoagulant properties), allergies, bleeding diatheses, frequent or recurrent infections, general wound healing, patients nutritional status.
2. Other preoperative considerations include the potential for postoperative trauma to the area caused by patient activities (particularly those involving shearing forces), the patient's ability to care for the wounds, and the surgeon's assessment of the patient's expectations.

Planning:
1. When a patient is scheduled for surgery the medical provider will complete a case request in the EMR. Based on the procedure code a DPC will be generated. This will be used along with the OR prep sheet to communicate needs to the surgical team.
2. The OR Prep sheet is completed by the Burn team at this time and emailed to the Periopburn@upstate.edu. The OR prep sheet includes all additional supplies required for the OR procedure. This needs to include location of procedure (Adult or Pediatric OR).
3. OR Prep sheet is printed by the Clinical Leader and given to the OR surgical team.
4. OR team needs to order burn dressing cart from distribution. The cart should be outside of the Burn OR prior to the case. Check that the cart is stocked properly prior the beginning of the case. Any missing items should be ordered from distribution immediately.
5. The surgical team will obtain the burn surgical cart (located in 5E 1A). the surgical team will ensure all necessary supplies are on the cart as dictated on the OR prep sheet and EMR, and then place in the OR suite. After completion of the OR case the cart is to be immediately restocked to ensure readiness for next case.
6. OR team will review the DPC and the OR Prep sheet to ensure all equipment and supplies are present.
7. Prior to sending for the patient the surgical team will call HVAC to obtain the room temperature. If the temperature is within the limits of the specified degrees requested in the OR prep sheet the surgical team will send for the patient. If the temperature is not within range of the specified target the surgical team will notify the attending to determine what steps to take.
8. Prior to the patient being transferred to the OR table, the surgical team will prepare the surgical bed based on the OR prep sheet.
9. Pre-operatively as soon as possible Occupational Therapy will be notified if they need to come to the OR to make splints for the patient.

Procedure:
1. Patients core temperature prior to procedure needs to be 36.8, to assist with the prevention of hypothermia. MD may place order to pre-warm patient prior to surgery. If the patient is a direct to the OR the room will already be pre-warmed. If the patient is going to patient holding, the room will need to be pre-warmed.
2. Upon arrival patient is moved safely to OR table, anesthesia safely monitors the patient and administers anesthesia. The patient is then positioned, prepped and draped
3. Timeout conducted to ensure
   a. Correct patient
   b. Correct procedure
   c. Correct position
   d. Correct equipment/requirements
   e. Allergies, medications, antibiotics and ASA score
   f. Everyone agrees all safety measures met
   g. If grafting will be taking place refer to policies: https://upstate.ellucid.com/documents/view/4556 PROC OPER B-03A - Procedure for Intra-operative Autologous Skin Harvesting and Implantation
4. Anesthesia will monitor the patient temperature throughout the case and communicate with the surgical team. Patients core temperature prior to procedure needs to be 36.8, to assist with the prevention of hypothermia. If the patients core temperature reaches 35.5 the case will be stopped.
5. After removal of the old dressing remove soiled gloves and apply new ones.

Xenografting:
1. Xenograft is removed from the package according to the IFU. RN will open outer package, then using aseptic techniques remove foil pack for surgical field.

Homografting:
1. Homograft comes frozen. It is typically meshed but also comes in sheet form. The surgical team needs to thaw with warm saline. The warmer temperature is set to 104 degrees.
2. Homograft is then rinsed three times in three separate sterile bowls with room temperature normal saline.

Autografting:
1. Autograft skin needs to be rinsed three times in three separate sterile bowls with room temperature saline. NO EPINEPHRINE.
2. Prepared skin is then meshed and placed in sterile bowl with room temperature saline in a safe location on the back table until used.

**Harvesting:**
1. Tissue harvest- refer to the following policy:
   PROC OPER B-03A - Procedure for Intra-operative Autologous Skin Harvesting and Implantation.

**Post Procedure:**
1. Blue ties from the lap pads are preserved for post-operative dressings. Dressing scissors need to remain available to the OR team until the entire dressing is complete and the patient is transferred to the bed.
2. Bulky dressings or wound vac will be applied for graft securement. Dressings will be applied by the surgeon, residents or RNFA. (OR team members are not responsible for applying dressings) The patient should be transferred to the bed with the use of a hoover mat to prevent shearing of grafts.
3. When the patient has returned to the unit, the patient will have a hovermat underneath them. Orders will be placed identifying the need for the use of the hovermat.
4. The hover mat will be used for transfers and positioning of patients with grafts to the posterior portion of the body, or per MD order to prevent shearing of grafts.
5. The hovermat will remain under the patient at all times unless soiled.

**Orders placed Post Procedure:**
1. Renew patient diet
2. Occupational and physical therapy orders placed on hold
3. Activity order
4. Splints or other devices that are applied during surgery or need to be applied post-surgery require an order to ensure proper treatment is provided to maintain healthy grafts.
5. Specific positioning orders

**Dressing Changes:**
1. Dressing changes will occur as ordered by the MD.
2. The initial dressing is done 3-5 days post-surgery.
3. Any sign of infection, increased odor, unusual bleeding should be brought to the attention of the Surgical Team.

**Dressing Change Procedure**
1. Room temperature needs to be increased to maintain the patient’s body temperature during the procedure, and close the door. Door should be kept closed with traffic kept to a minimum.
2. High touch surface cleaning with approved disinfectants will be conducted pre and post dressing
3. Ensure patients temperature is above 36.8 prior to the start of dressing change and monitor throughout.
4. Pre-medicate prior to procedure
5. Set up dressing table with the dressing supplies using aseptic technique in patient room or shower room.
6. Only supplies that are needed will be opened. Additional items will be open as needed.
7. Isolation gowns are to be worn by anyone in the room during the dressing change.
8. Dressings will be removed gently to maintain skin/graft integrity. If there is failing graft, noticeable foul smell or signs of infection notify the MD immediately.
9. Remove soiled gloves and apply new ones
10. Cleaning wounds/grafts:
   a. cleanse the areas with chlorhexidine and warm water using 4x4 gauze in a sterile bowl
   b. Rinse with warm water from a second sterile bowl
   c. Pat all areas dry.

11. Apply creams or ointments as ordered, then apply burn dressings that are bulky to protect new grafts, but allow for ROM. Apply topical cream, ointment or occlusive dressings as ordered. Dressings should be applied with enough bulk to absorb drainage, protect the grafts and provide comfort and movement according to orders.
12. Ensure all grafted or residual burned areas are properly covered and dressings are secure. (there should be no burn or graft visible, unless otherwise specified)
13. Remaining supplies that are opened will be discarded.
14. Scissors are disposable, both nurse and debridement sets, therefore need to go in the sharps after each dressing change.

Reviewed 8/22/2018